

Patent claims

1. A device for wet treatment of laundry, in particular a washer-extractor (10, 41), with an inner drum (12) which is rotationally driven about a rotation axis (11) and can preferably pivot about at least one pivot axis (22, 27) extending transversely with respect to the rotation axis (11) and which receives the laundry that is to be treated, the inner drum (12) having at least one front-end opening (13), characterized in that the inner drum (12) has a single front-end opening (13), and a door (29, 46) is assigned where appropriate to this opening (13).
2. The device as claimed in claim 1, characterized in that the opening (13) is assigned a separate door (29, 46) which is preferably separated from the inner drum (12) in such a way that it does not co-rotate with the inner drum (12) and also cannot pivot, or can pivot only to a limited extent, with the inner drum (12).
3. The device as claimed in claim 1 or 2, characterized in that the door (29, 46) can be moved toward the opening (13) of the inner drum (12) and away from the opening (13), and otherwise the door (29) is preferably stationary relative to the inner drum (12).
4. The device as claimed in one of the preceding claims, characterized in that the water-permeable inner drum (12) is surrounded by a water-impermeable drum housing (14) having a single opening (15) which is arranged adjacent to the (only one) opening (13) of the inner drum (12) and which corresponds with the opening (13) of the inner drum (12), the opening (15) of the drum

housing (14) and the opening (13) of the inner drum (12) being [lacuna] by the same and only one door (29, 46).

5 5. The device as claimed in one of the preceding
claims, characterized in that the door (29, 46) is
assigned to the inner drum (12) and/or the drum
housing (14) in such a way that, in a position of
10 the inner drum (12) in which the rotation axis
(11) thereof extends approximately horizontally
(operating position), the opening (15) of the drum
housing (14) and/or the opening (13) of the inner
drum (12) is located next to the door (29, 46),
and can preferably be driven against at least the
15 single opening (15) in the drum housing (14).

6. The device as claimed in one of the preceding
claims, characterized in that the door (29, 46) is
assigned to the opening (15) of the drum housing
20 (14) in such a way that, in the operating position
of the drum housing (14) with the drum (12)
rotating therein, preferably with the rotation
axis (11) of the inner drum (12) approximately
horizontal, the opening (15) can be closed by the
25 door (29, 46).

7. The device as claimed in one of the preceding
claims, characterized in that the door (29, 46)
has at least one seal (37, 55) which corresponds
30 with a sealing face surrounding the opening (15)
in the drum housing (14) and which seals the
separate, preferably substantially stationary door
(29, 46) off from the drum housing (14).

35 8. The device as claimed in one of the preceding
claims, characterized in that the door (29, 46)
can be moved toward and away from the opening (15)
of the drum housing (14) and has a door support
(30, 50).

9. The device as claimed in one of the preceding claims, characterized in that the door (29, 46) is to be at least partially opened, in particular by a relative movement of an inner door (47) relative to a door frame (48).
10. The device as claimed in one of the preceding claims, characterized in that the entire door (29, 46), in particular the inner door (47) and the door frame (48), can be moved to and fro, and the door (29) or door frame (48) is connected to the preferably stationary door support (30, 50) via a flexible connecting means.
11. The device as claimed in one of the preceding claims, characterized in that the door (29, 46) is preferably stationary like the door support (30, 50), and the drum housing (14) can be driven with the inner drum (12) along the rotation axis (11) of the inner drum (12) in the direction toward the door (29, 46) and/or the door support (30, 50).
12. The device as claimed in one of the preceding claims, characterized in that the door (46) is arranged in a dividing wall (43) between a dirty area (42) and a clean area (44), and in this case the entire door (46), specifically both the inner door (47) and the door frame (48), can preferably be moved to and fro in a direction perpendicular to the dividing wall (43).
13. The device for wet treatment of laundry, in particular a washer-extractor (10, 41), with an inner drum (12) which is rotationally driven about a rotation axis (11) and can preferably pivot about at least one pivot axis (22, 27) extending transversely with respect to the rotation axis (11) and which receives the laundry that is to be

5 treated, and a preferably stationary drum housing (14) surrounding the inner drum (12), in particular as claimed in one of claims 1 through 12, characterized in that the inner drum (12) and the drum housing (14) surrounding it can pivot about the at least one pivot axis (22, 27) into any desired loading positions.

10 14. The device as claimed in one of the preceding claims, characterized in that the inner drum (12) with the drum housing (14) can be pivoted into such loading positions, the rotation axis (11) of the inner drum (12) extending perpendicularly or at an angle of up to 60° to the perpendicular, and
15 the pivot axis (27), in particular at least one of two opposite axle journals (26) for forming the pivot axis (27) of the drum housing (14), is assigned a direct drive (28) for pivoting the drum housing (14) with the inner drum (12) mounted
20 rotatably therein.

15 15. The device as claimed in claim 14, characterized in that at least one axle journal (26) of the pivot axis (27) of the drum housing (14) is assigned at least one delivery means for at least
25 one medium for wet treatment of the laundry, and the delivery means is preferably configured as an axial passage for the at least one medium.

30 16. The device as claimed in claim 15, characterized in that a free front end of the at least one axle journal (26) is assigned a rotary attachment for at least one admission line for delivering at least one medium to the inside of the drum housing
35 (14).

17. The device for wet treatment of laundry, in particular a washer-extractor (10, 41), with an inner drum (12) which is rotationally driven about

5 a rotation axis (11) and can preferably pivot
about at least one pivot axis (22, 27) extending
transversely with respect to the rotation axis
(11) and which receives the laundry that is to be
10 treated, and a preferably stationary drum housing
(14) surrounding the inner drum (12), in
particular as claimed in one of the preceding
claims, characterized in that the at least one
medium necessary for the wet treatment can be
15 delivered to the inside of the drum housing (14),
in particular of the inner drum (12), through a
door (29, 46) assigned to the opening (15) of the
drum housing (14).

15 18. The device as claimed in one of the preceding
claims, characterized in that the door (29, 46) is
stationary while the inner drum (12) is being
driven in rotation.

20 19. The device as claimed in one of the preceding
claims, characterized in that the at least one
medium can be delivered to the inside of the drum
housing (14) or of the inner drum (12) through at
least one preferably closable passage in the door
25 (29, 46), in which case the at least one passage
is preferably assigned to an inner circle segment
(35) of the door (29) or of an inner door (47) of
the door (46).

30 20. A method for wet treatment of laundry, in
particular in a washer-extractor (10, 41), in
which method an inner drum (12) that can be driven
in rotation about a rotation axis (11) is loaded
with the laundry or other items that are to be
35 treated, and the laundry or other items are then
washed and preferably spin-dried, characterized in
that loading is carried out with the rotation axis
(11) of the inner drum (12) perpendicular or
inclined relative to the perpendicular, and,

during loading, the inner drum (12) is driven in rotation at least intermittently about the rotation axis (11).

- 5 21. The method as claimed in claim 20, characterized
in that, during loading, the inner drum (12) is
driven at such a speed of rotation that the
laundry or items in the inner drum (12) experience
a centrifugal acceleration of up to 25 g.
- 10 22. The method as claimed in claim 20 or 21,
characterized in that, during loading, the
rotation axis (11) of the inner drum (12) is
inclined maximally relative to the perpendicular
15 to such an extent that the laundry or other items
for the most part still reach the bottom area of
the inner drum (12) lying opposite the opening
(13).
- 20 23. The method as claimed in one of the preceding
claims, characterized in that, during loading, the
rotation axis (11) of the inner drum (12) is
inclined relative to the perpendicular by a
maximum of 60°, preferably by not more than 50°,
25 in particular 40°.